

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings of claims in the application:

LISTING OF CLAIMS:

1. (original) Sensor nodes having
  - sensor means (7) for measuring a sensor measurement value,
  - means (6) for measuring distance,
  - means (5) for communicating.
2. (original) The sensor nodes as claimed in claim 1, characterized in that the communication means (5) are means for communicating with further sensor nodes.
3. (currently amended) The sensor nodes as claimed in ~~one of the preceding claims~~ claim 1, characterized in that the communication means (5) include a WLAN module.
4. (currently amended) The sensor nodes as claimed in ~~one of the preceding claims~~ claim 1, characterized in that the distance measurement means (6) have means for measuring a signal transit time.
5. (currently amended) The sensor nodes as claimed in ~~one of the preceding claims~~ claim 1, characterized in that the distance measurement means (6) have a Kalman filter for measuring the distance.

6. (currently amended) A sensor network comprising a plurality of sensor nodes (1) as claimed in ~~one of the claims 1 to 5~~ claim 1.

7. (original) The sensor network as claimed in claim 6, characterized in that the sensor nodes (1) have means for determining position via the distance measurement means (6).

8. (currently amended) The sensor network as claimed in ~~one of the claims 6 or 7~~ claim 6, characterized in that one of the sensor nodes has storage means for storing its absolute position.

9. (currently amended) The sensor network as claimed in ~~one of the claims 6 to 8~~ claim 6, characterized in that the communication means (5) are set up in such a way that sensor nodes (1) in the sensor network can communicate with remote sensor nodes by forwarding the communication via adjacent sensor nodes.

10. (currently amended) The sensor network as claimed in ~~one of the claims 6 to 9~~ claim 6, characterized in that the sensor network is set up in such a way that the sensor measurement values of the sensor nodes (1) and the positions of the sensor nodes (1) can be queried.

11. (currently amended) The sensor network as claimed in ~~one of the claims 6 to 10~~ claim 6, characterized in that the sensor network is a self-organizing sensor network.

12.(currently amended) A method for location-resolved measurement of sensor measurement values characterized in that a sensor network as claimed in ~~one of the claims 6 to 11~~ claim 6 is used for measuring the sensor measurement values.

13.(new) The sensor nodes as claimed in claim 2, characterized in that the communication means (5) include a WLAN module.

14.(new) The sensor nodes as claimed in claim 2, characterized in that the distance measurement means (6) have means for measuring a signal transit time.

15.(new) The sensor nodes as claimed in claim 2, characterized in that the distance measurement means (6) have a Kalman filter for measuring the distance.

16.(new) The sensor nodes as claimed in claim 3, characterized in that the distance measurement means (6) have means for measuring a signal transit time.

17.(new) The sensor nodes as claimed in claim 3, characterized in that the distance measurement means (6) have a Kalman filter for measuring the distance.

18.(new) The sensor nodes as claimed in claim 4, characterized in that the distance measurement means (6) have a Kalman filter for measuring the distance.

19.(new) The sensor network as claimed in claim 7,  
characterized in that  
one of the sensor nodes has storage means for storing its  
absolute position.

20.(new) The sensor network as claimed in claim 7,  
characterized in that  
the communication means (5) are set up in such a way that  
sensor nodes (1) in the sensor network can communicate with  
remote sensor nodes by forwarding the communication via  
adjacent sensor nodes.